## DEPARTMENT OF THE NAVY

COMMANDER SPACE AND NAVAL WARFARE SYSTEMS COMMAND PROGRAM EXECUTIVE OFFICER COMMAND, CONTROL, COMMUNICATIONS, COMPUTERS, AND INTELLIGENCE AND SPACE 4301 PACIFIC HIGHWAY

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IN REPLY!



PROGRAM EXECUTIVE OFFICE FOR INTEGRATED WARFARE SYSTEMS (20376-2301) DEPUTY COMMANDER FOR WARFARE SYSTEMS ENGINEERING (20376-5011) 1333 ISAAC HULL AVENUE SE WASHINGTON NAVY YARD DC

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Ser SEA 06/027 Ser C4I and Space/098 Ser SPAWAR/150 Ser IWS/084

20 Mar 2003 20 Mar 2003 20 Mar 2003 20 Mar 2003

JOINT LETTER

Commander, Space and Naval Warfare Systems Command From:

Program Executive Officer for Integrated Warfare Systems

Deputy Commander for Warfare Systems Engineering

Program Executive Officer, C4I and Space

Subj: OPEN ARCHITECTURE COMPUTING ENVIRONMENT DESIGN GUIDANCE

(VERSION 1.0) AND OPEN ARCHITECTURE COMPUTING ENVIRONMENT

TECHNOLOGIES AND STANDARDS (VERSION 1.0)

Ref: (a DOD 4120.24M, DSP Policies and Procedures

Encl: (1) Open Architecture Computing Environment Design Guidance (Version 1.0)

(2) Open Architecture Computing Environment Technologies and Standards Version 1.0)

(3) Re-usable Application Integration and Development Standards (Version 1.5)

The Assistant Secretary of the Navy for Research, Development and Acquisition (ASN (RDA)) assigned the Program Executive Office for Integrated Warfare Systems (PEO IWS) with responsibility for coordinating the introduction of Open Architecture (OA) into the Navy's combat systems! Computing technology is a key part of the Therefore, as part of the OA tasking, and based on significant research and testing, the Naval Surface Warfare Center Dahlgren Division (NSWCDD) developed two supporting documents relevant to computing for OA. The Open Architecture Computing Environment Design Guidance, Version 1.0 (Interim) document provides interim guidance concerning design aspects of the standards-based computing environment that is to be used in OA A companion document, Open Architecture warfighting systems. Computing Environment Technologies and Standards, Version 1.0 (Interim), provides an enumeration of the standards and product selection criteria that apply to the OA technology base.

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together, these documents describe the technical characteristics of and requirements for computing systems in support of OA-based combat systems. This unified set of computing resources is called the Open Architecture Computing Environment (OACE). These documents provide significant insight into OACE capabilities and requirements, but they are not yet fully mature. Accordingly, they are being disseminated for review across the naval community for an initial assessment before proceeding with the formal procedure required by reference (a).

- 2. Similarly, the Program Executive Office for Command, Control, Communications, Computers and Intelligence and Space (PEO C4I and Space) has created development guidance for all applications within the C4I domain. The Re-usable Application Integration and Development Standards (RAPIDS) provides detailed programming guidance to migrate applications to a highly modular design that supports re-configuration and extension of functional capabilities and promotes portability across multiple enterprise architectural The guidance includes specifications for delivery of software to the Distributed Development Web Environment (DDWE) to promote use of common components and initiation of a limited open source development environment. The PEO C4I design documentation is also not fully mature, and is being disseminated for review.
- 3. PEO IWS, PEO C4I and Space, and SPAWAR have made preliminary reviews of both guidance documents, and believe that they are complimentary in nature. These design documents will serve as the foundation for development guidance across the combat system and C4I communities. It is the intention of PEOs IWS and C4I, along with SPAWAR, to co-evolve and merge these documents where practical into a single OA framework to promote commonality of implementation in each domain.
- 4. In order to maintain the requisite schedule for programs relying on these documents, your concurrence and/or comments on enclosures (1), (2), and (3) are requested by 15 May 2003. Please direct all programmatic and policy comments on OACE to CAPT Thomas J. Strei, PEO IWS Code 7.1 at <a href="StreitJ@navsea.navy.mil">StreitJ@navsea.navy.mil</a> or (202) 781-1160 and all OACE technical comments to Mr. Michael W. Masters, Chairman, OA Technical Architecture Integrated Product Team (TA IPT at (540) 653-1611, or via email at <a href="MastersMW@nswc.navy.mil">MastersMW@nswc.navy.mil</a>. Please direct all programmatic and policy comments on RAPIDS to Ed Wunner,

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PEO C4I at edward.wunner@navy.mil, or (619) 524-7595, and all technical comments on RAPIDS to Andrew Cox at andrew.cox@navy.mil

5. Your support is greatly appreciated

D. M. BAUMAN A. B. HICKS C. T. BUSH K. D. SLAGHT

Copy to: CNO (N2, N61, N70, N75, N76, N77, N78 COMNAVAIRSYSCOM COMNAVSEASYSCOM COMSPAWARSYSCOM COMNAVNETWARCOM CG, MCSC ONR HQMC/C4I DASN (IWS) DASN (C4I/SPACE) DASN (ACQ) DASN (AIR) DASN (M&B) DASN (SHIPS) DASN (LMW) DASN (IPO) DASN (RDT&E) PEO (IWS) (IWS 1.0, IWS 2.0, IWS 3.0, IWS 4.0, IWS 5.0, IWS 6.0) PEO (C4I/SPACE) PEO (CARRIERS) PEO (SHIPS) PEO (SUBS) PEO (IT) PEO (A) PEO (T) PEO (W) PEO (JSF) PEO (LMW) USCG (G-D)